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State of Utah DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 801-538-5340 MINERALS PROGRAM
FILE COPY

September 19, 1989

Mr. Richard McNeely Regional Mine Manager Western States Minerals Corporation 84 Glen Corran Circle Sparks, Nevada 89431

Dear Mr. McNeely:

Re: Soil Sampling and Test Plots, Drum Mine, Western States Minerals Corporation, M/027/007, Millard County, Utah

This letter summarizes some of the items we discussed in Salt Lake City on September 12, 1989. Our conversation focused on the steps Western States Minerals Corp. (WSMC) would take to alleviate the missing topsoil situation, at the Drum mine site.

We talked about establishing 4 revegetation test plots, 2 on retired heap leaches and 2 on waste dumps. Each plot would be about 1/2 to 1 acre in size. The treatments in each plot will be decided upon, once the soil sampling is completed. Basically, each treatment would involve ripping, then broadcasting the seed mix found in the approved Reclamation Plan. Other treatments might involve mulching and fertilizing.

WSMC will need to coordinate with Jumbo Mining Company (the present operators of the Drum Mine) in determining an acceptable location for the test plots.

It will be necessary to bond for the possibility of hauling topsoil from a barrow area, in order to obtain a bond reduction. If the test plots eventually show that the waste material will support plants, the entire bond will be released.

Two composite samples need to be taken at each site, the first composite sample > 1 foot below the surface; the second composite needs to be taken at the surface. Each composite should consist of about 10 separate samples mixed in a large bucket.

The following is a list of soil parameters that should be evaluated on the old heaps and waste dumps:

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- pH
 Saturation Percentage
- 5. Calcium
- 7. Sodium
- 9. Sulphur Potential acidity11. Phosphorous
- 13. Alkalinity

Please call if you have questions.

- 2. Electrical Conductivity
- 4. Particle Size
- 6. Magnesium
- 8. SAŘ
- 10. Potassium
- 12. Nitrate Nitrogen
- 14. CEC

Sincerely,

Holland Shepherd

Reclamation Soils Specialist

jb

cc: Ed King, Jumbo Mining Lowell Braxton

Wayne Hedberg

MN5/140-141